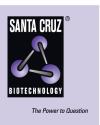
SANTA CRUZ BIOTECHNOLOGY, INC.

OX2R (OX110): sc-53103



BACKGROUND

OX2 (CD200, MOX2), a member of the immunoglobulin superfamily (IgSF), is a 248 residue cell surface glycoprotein that is expressed in lymphoid cells, neurons and endothelium. OX2 receptor (OX2R) is a membrane protein with up to 70% of its weight derived from N-linked glycosylation; it is primarily expressed in lymphoid and neuronal tissue. Phylogenetic analysis of OX2R with respect to other leukocyte IgSF glycoproteins suggests that OXR2 and OX2 share a common ancestral protein. The cytoplasmic portion of OX2R contains NPXY motifs that are known to interact with PTB/PID binding domains. The interaction between OX2 and OX2R may contribute to pathways that suppress and limit macrophage induced inflammatory damage in tissue.

REFERENCES

- McCaughan, G.W., Clark, M.J., Hurst, J., Grosveld, F. and Barclay, A.N. 1987. The gene for MRC 0X2 membrane glycoprotein is localized on human chromosome 3. Immunogenetics 25: 133-135.
- Wright, G.J., Puklavec, M.J., Willis, A.C., Hoek, R.M., Sedgwick, J.D., Brown, M.H. and Barclay, A.N. 2000. Lymphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function. Immunity 13: 233-242.
- Hoek, R.M., Ruuls, S.R., Murphy, C.A., Wright, G.J., Goddard, R., Zurawski, S.M., Blom, B., Homola, M.E., Streit, W.J., Brown, M.H. Barclay, A.N. and Sedgwick, J.D. 2000. Downregulation of the macrophage lineage through interaction with OX2 (CD200). Science 290: 1768-1771.
- Gorczynski, R.M., Yu, K. and Clark, D. 2000. Receptor engagement on cells expressing a ligand for the tolerance-inducing molecule OX2 induces an immunoregulatory population that inhibits alloreactivity *in vitro* and *in vivo*. J. Immunol. 165: 4854-4860.
- Dick, A.D., Broderick, C., Forrester, J.V. and Wright, G.J. 2001. Distribution of OX2 antigen and OX2 receptor within retina. Invest. Ophthalmol. Vis. Sci. 42: 170-176.

CHROMOSOMAL LOCATION

Genetic locus: Cd200r1 (mouse) mapping to 16 B4.

SOURCE

OX2R (OX110) is a rat monoclonal antibody raised against fusion protein mCD200RCD4d3+4 of mouse origin.

PRODUCT

Each vial contains 200 $\mu g~lg G_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OX2R (OX110) is available conjugated to either phycoerythrin (sc-53103 PE) or fluorescein (sc-53103 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

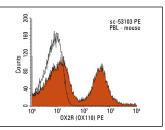
APPLICATIONS

OX2R (OX110) is recommended for detection of OX2R of mouse origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for OX2R siRNA (m): sc-42957, OX2R shRNA Plasmid (m): sc-42957-SH and OX2R shRNA (m) Lentiviral Particles: sc-42957-V.

Molecular Weight of OX2R: 60-80 kDa.

DATA



0X2R (0X110): sc-53103. Indirect FCM analysis of mouse peripheral blood leukocytes stained with 0X2R (0X110), followed by PE-conjugated goat anti-rat IgG: sc-3740. Black line histogram represents the isotype control, normal rat IgG₁: sc-3882.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.